WHAT IS CLAIMED IS:

1. A video data transmitting/receiving method which uses a transmission line for transmitting video data constituted of three signals of a 4:2:2 format, comprising:

allocating 3-channel video data of two pixels constituted of three signals of a 4:4:4 format to data of the 4:2:2 format of three pixels to convert the video data into 2-channel video data, mapping the converted video data in an effective image area defined by the 4:2:2 format, and serializing video data obtained by the mapping to transmit the data through the transmission line, on a transmission side; and

taking out the 2-channel video data from the received video data, and allocating the video data of three pixels to data of the 4:4:4 format of two pixels to restore the 3-channel video data constituted of the three signals of the 4:4:4 format on a reception side.

2. A video data transmitting/receiving method according to claim 1,

wherein the video data is transmitted through a plurality of transmission lines if the number of horizontal effective pixels of the video data constituted of the three signals of the 4:4:4 format exceeds 2/3 of the number of horizontal effective pixels of the 3-channel video data constituted of the three signals of the 4:2:2 format, and

the number of transmission lines is set to an integer value obtained by rounding up decimals of a value which is obtained by an expression:

(number of horizontal effective pixels of the video data constituted of the three signals of the 4:4:4 format)÷(number of horizontal effective pixels of the 3-channel video data of the three signals of the 4:2:2 format)

×3/2.

3. A video data transmitting/receiving method according to claim 1,

wherein the three signals of the 4:4:4 format and the three signals of the 4:2:2 format are three signals selected from three signals of RGB, three signals of Y, Pr, Pb, and three signals of Y, R-Y, B-Y, respectively.

4. A video data transmitting/receiving method which uses a transmission line for transmitting video data constituted of three signals of a 4:2:2 format, comprising:

allocating 3-channel video data of two pixels constituted of three signals of a 4:4:4 format to data of the 4:2:2 format of three pixels to convert the video data into 2-channel video data, mapping the converted video data in an effective image area defined by the 4:2:2 format in a manner of filling the effective image area with data rows corresponding to scanning lines sequentially from a head address of the effective image area, and serializing video data obtained by the mapping to transmit the data through the transmission line, on a transmission side; and

cutting out a data row from the transmitted video data for each predetermined pixel to take out the 2-channel video data, and allocating the video data of three pixels to data of the 4:4:4 format of two pixels to restore the 3-channel video data constituted of the three signals of the 4:4:4 format on a reception side.

5. A video data transmitting/receiving method according to claim 4,

wherein the video data is transmitted through a plurality of transmission lines if the number of effective pixels of the video data constituted of the three signals of

the 4:4:4 format exceeds 2/3 of the number of effective pixels of the 3-channel video data constituted of the three signals of the 4:2:2 format.

6. A video data transmitting/receiving method according to claim 4,

wherein the three signals of the 4:4:4 format and the three signals of the 4:2:2 format are three signals selected from three signals of RGB, three signals of Y, Pr, Pb, and three signals of Y, R-Y, B-Y, respectively.